

**IN THE CLAIMS**

Please find the claims to be in the form as follows:

**Claim 1 (previously presented):** An optical transmission system comprising:

a plurality of optical signal transmitters for receiving signal inputs, upconverting received signals to a unique frequency band and transmitting optical signals representative of received signals, wherein each optical signal transmitter produces optical signals having a first characteristic wavelength;

a plurality of optical transmission lines coupled to said optical signal transmitters, said optical transmission lines being combined to form a single optical transmission line at a first end of said optical transmission line;

at least one headend coupled to a second end of said optical transmission line opposite said first end, said head end including at least one DWDM signal receiver, said at least one DWDM signal receiver having a second characteristic wavelength, said second characteristic wavelength corresponding to the first characteristic wavelength of the optical signal transmitter;

an output from said at least one DWDM signal receiver;

at least one information signal line coupled to said output of said at least one DWDM signal receiver; and

wherein no signal multiplexer is used to combine said optical transmission lines combined into said single optical transmission line.

**Claim 2 (original):** The optical transmission system of Claim 1, wherein said plurality of optical signal transmitters produce a plurality of optical signals, and wherein said plurality of optical signals are freely combined.

**Claim 3 (previously presented):** The optical transmission system of Claim 1, wherein each said unique frequency band, is separated by about the speed of light divided by 50.

**Claim 4 (previously presented):** The optical transmission system of Claim 3, wherein each upconverter is characterized by said frequency band being unique to that said upconverter and different from each said frequency band created by each other said upconverter.

**Claim 5 (previously presented):** The optical transmission system of Claim 3, wherein there is no overlap between frequency bands corresponding to each of said upconverters and the frequency bands are separated by about 50 Gz.

**Claim 6 (original):** The optical transmission system of Claim 2, wherein said plurality of optical signals are combined with a splitter/combiner apparatus.

**Claim 7 (original):** The optical transmission system of Claim 1, wherein the output from a first of said at least one DWDM receivers and the output from a second of said at least one DWDM receivers are signals having different wavelengths, and wherein said different wavelengths do not converge.

**Claim 8 (previously presented):** A method of optically transmitting a signal comprising:

- receiving a plurality of signal inputs;
- upconverting said signal inputs into a plurality of non-overlapping frequency bands and transmitting a plurality of optical signals from at least one optical transmission source on a plurality of optical transmission lines, wherein each optical signal has a first characteristic wavelength;
- combining said optical transmission lines to into a single line and coupling said single line to at least one headend, said headend including at least one DWDM signal receiver having a second characteristic wavelength, said second characteristic wavelength corresponding to the first characteristic wavelength of the optical signal transmitter;
- transmitting an output from said at least one DWDM signal receiver;
- coupling at least one information signal line to said output of said at least one DWDM signal receiver; and
- wherein no signal multiplexer is used to combine said plurality of optical transmission lines into said single line.

**Claim 9 (previously presented):** The method of Claim 8, wherein the step of receiving the plurality of signal inputs includes receiving the plurality of signal inputs into a plurality of

optical signal transmitters.

Claim 10 (previously presented): The method of Claim 8, wherein the step of combining further comprises combining said plurality of said optical transmission lines together in a plurality of locations between the transmission source and the headend without use of any signal multiplexing package.

Claim 11 (previously presented): The method of Claim 8, wherein the step of upconverting the plurality of optical signals further comprises the non-overlapping frequency bands being separated by about 50 Gz before the step of transmitting the plurality of optical signals from the at least one transmission source.

Claim 12 (previously presented): An optical transmission system comprising:

- a plurality of optical signal transmitters for receiving signal inputs and transmitting optical signals, wherein each optical signal transmitter produced optical signals having a first characteristic wavelength;

- a plurality of transmission clusters, each transmission cluster comprising at least one of said optical signal transmitters;

- a plurality of optical transmission lines coupled to said optical signal transmitters, said optical transmission lines being combined into a single line in at least one location and said single line being coupled to at least one headend, said head end including at least one DWDM signal receiver;

- said at least one DWDM signal receiver having a second characteristic wavelength said second characteristic wavelength corresponding to the first characteristic wavelength of the optical signal transmitter;

- an output from said at least one DWDM signal receiver;

- at least one information signal line coupled to said output of said at least one DWDM signal receiver; and

- wherein no signal multiplexer is employed between said plurality of optical signal transmitters and said headend.

**Claim 13 (previously presented):** The optical transmission system of Claim 12, wherein said plurality of optical signal transmitters produce a plurality of optical signals, and wherein said plurality of optical signals are freely combined without implementing of a DWDM package.

**Claim 14 (previously presented):** The optical transmission system of Claim 12, wherein each optical signal transmitter includes an upconverter that creates a frequency band that is non-overlapping from each of the other frequency bands created by each of the other upconverters.

**Claim 15 (previously presented):** The optical transmission system of Claim 14, wherein each of the frequency bands is characterized by a separation of about 50 Gz from the next closest frequency band.

**Claim 16 (previously presented):** The optical transmission system of Claim 14, wherein the frequency bands corresponding to each of said upconverters are separated by amount about equal to the speed of light divided by 50.

**Claim 17 (original):** The optical transmission system of claim 13, wherein said plurality of optical signals are combined with a splitter/combiner apparatus.

**Claim 18 (original):** The optical transmission system of Claim 12, wherein said headend includes a single receiver.

**Claim 19 (original):** The optical transmission system of Claim 12, wherein said headend includes a plurality of receivers.

**Claim 20 (original):** The optical transmission system of Claim 12, wherein said headend includes at least one dense wavelength division demultiplexer (DWDD) device.

**Claim 21 (original)** The optical transmission system of Claim 12, wherein the output from a first of said at least one DWDM receivers and the output from a second of said at least one DWDM receivers are signals having different wavelengths, and wherein said different wavelengths do

**not converge.**